



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

OCT 6 2004

400 Seventh St., S.W.  
Washington, D.C. 20590

Mr. Rich Heylmun  
Operations Manager  
Professional Emergency Resource Services  
P. O. Box 1560  
Ogden, UT 84402-1560

Reference No.: 04-0059

Dear Mr. Heylmun:

This responds to your letter requesting clarification of the marking exception for petroleum distillate fuels in § 172.336 under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). You reference an April 24, 2001 clarification letter, Reference No. 01-0082, and ask whether a cargo tank motor vehicle containing denatured ethanol (95% ethanol and 5% gasoline) is eligible for the marking exceptions in § 172.336(c)(4) and (5). I apologize for the delay and any inconvenience it may have caused.

Under § 173.22, it is the shipper's responsibility to properly classify a hazardous material and assign it a proper shipping name from the Hazardous Materials Table (HMT). For a material not specifically identified by name in the HMT, the HMR require that the material be described by the shipping name that "most appropriately" describes the material. Based on the information provided, it is our opinion that the appropriate shipping description for your mixture of 95% ethanol and 5% gasoline is "Flammable liquid, n.o.s. (Ethanol, Gasoline)". The high percentage of alcohol in this mixture makes it ineligible as a petroleum distillate. Therefore, the cargo tank does not qualify for the marking exceptions in § 172.336(c)(4) and (5).

Also, for your information, we proposed to reinstate the proper shipping name "Denatured alcohol" in a notice of proposed rulemaking published August 12, 2004 (Docket No. RSPA-04-18683 (HM-218C), 69 FR 49846). Additionally, we proposed to add new special provision 172 for both "Denature alcohol, NA 1987" and "Alcohols, n.o.s., UN 1987" to allow solutions of alcohol and petroleum products to be described as either "Denature alcohol" or "Alcohols, n.o.s.", provided the solution contains no more than 5% petroleum products.

I trust this satisfies your request.

Sincerely,

Hattie L. Mitchell  
Chief, Regulatory Review and Reinvention  
Office of Hazardous Materials Standards



040059

172.336



Professional Emergency  
Resource Services

Corbin  
§ 172.336  
Markings  
04-0059

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1-800-728-2482

P.O. Box 1560 Ogden, Utah, 84402-1560 • Phone: (801) 629-0667 • Fax: (801) 629-0680 • www.pers-er.com • info@pers-er.com

March 18, 2004

Office of Hazardous Materials Standards,  
Research and Special Programs Administration,  
Attn: DHM-10, U.S. Department of Transportation,  
400 7<sup>th</sup> Street SW., Washington, DC 20590-0001

Please provide an interpretation of the applicability of denatured ethanol, 95% Ethanol and 5% Gasoline, shipped as Flammable Liquids n.o.s., to the regulations found in § 172.336 (c) (4) and (5).

A previous interpretation dated April 24, 2001, Ref. No. 01-0082 is posted on the RSPA web-site. The inquirer asked if a fuel containing 80% ethyl alcohol and 20 % petroleum would be considered a petroleum distillate fuel. The answer provided in the interpretation states "Petroleum distillate fuel is generally defined to mean a liquid mixture of hydrocarbons extracted from petroleum by distillation and is used in many applications including fuel. Thus your mixture is eligible for the marking exceptions in § 172.336 (c) (4) or (5)."

I have failed to understand the conclusion regarding eligibility "Thus your mixture is eligible for the marking exceptions in § 172.336 (c) (4) or (5)," from the statement "Petroleum distillate fuel is generally defined to mean a liquid mixture of hydrocarbons extracted from petroleum by distillation and is used in many applications including fuel".

A reader may apply this interpretation to the same fuel mixture listed above in order to defend their actions, but the response seems to be more broadly applicable even if not intended to be. I read the interpretation to imply that alcohols generally may be considered to be liquid petroleum distillate fuels.

It is my understanding that petroleum distillates are separated from crude oil by distillation. Ethyl alcohol is obtained from the fermentation of grains and is not derived from petroleum distillation. Ethyl alcohol has some properties dissimilar to most DOT class 3 petroleum distillates, such as being water-miscible.

Gasohol is specifically named in the regulations found in § 172.336 (c) (4) and (5) authorizing a cargo tank containing gasohol to be marked with the ID number for the liquid petroleum distillate fuel having the lowest flash point. The HM Table, § 172.101 authorizes the proper shipping name "gasohol" to describe gasoline containing ethyl

alcohol, including the use of ID number "1203" on the condition that the percentage of ethyl alcohol may not exceed 20 percent.

The text of § 172.336 (c) (4) "if the identification number is displayed for the distillate fuel having the lowest flash point." differs from the text of § 172.336 (c) (5) "if the identification number is displayed for the liquid petroleum distillate fuel having the lowest flash point". I am not under the impression that the wording of § 172.336 (c) (4) and (5) intends to identify different fuels, but to clarify applicability of the regulation to cargo tanks and compartmented cargo tanks.

The interpretation dated April 24, 2001 is the only official document or regulation that I have been able to locate authorizing alcohol (other than gasohol as identified in the HM Table) to be shipped as a liquid petroleum distillate fuel, thus making it eligible to be marked as described in § 172.336 (c) (4) or (5). It would be convenient if the previous interpretation was sustained, but, without further guidance from your office I have some concerns about applying it to shipments or referring others to use it.

Due to the increasing domestic shipment of denatured alcohols in cargo tanks clarification of this requirement will be greatly appreciated. I appreciate your time and effort in responding to this request.

Sincerely,



Rick Heylmun  
Operations Mgr.  
PERS  
800-728-2482